

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) A method of preparing a cell population comprising stem cells for introducing into a patient, comprising:

(a) obtaining adipose tissue from said patient;

(b) —processing said adipose tissue obtained from a patient to separate therelease cells therein, wherein said processing comprises one or more procedures selected from the group consisting of:

(i) physical cutting or mincing of the adipose tissue;

(ii) treating the adipose tissue with an enzyme that facilitates the release of cells;

(iii) exposing the adipose tissue to ultrasonic energy; and

(iv) treating the adipose tissue with perflurocarbons; from lipids and

(eb) purifying separating the separated released cells from the lipids, wherein said separating comprises one or more procedures selected from the group consisting of:

(i) use of a density gradient;

(ii) centrifugation; and

(iii) filtration;

wherein said method does not include isolating stem cells from other cells purified separated in (eb), thereby preparing a purified-cell population comprising adipose tissue-derived stem cells.

2. (Previously Presented) The method of claim 1, wherein said purified cell population further comprises one or more cells selected from the group consisting of: red blood cells, white blood cells, fibroblasts, neutrophils, monocyte/macrophages, and basophils.

3. (Previously Presented) The method of claim 1, wherein said purified cell population further comprises one or more tissue components selected from the group consisting of: extracellular matrix polypeptides, proteoglycans, cytokines, and growth factors.

4.-19. (Cancelled)

20. (Previously Presented) The method of claim 1 wherein the patient is an animal having a tail, and said adipose tissue is obtained from the tail head region of the patient.

21.-150. (Cancelled)

151. (New) A method of preparing a cell population comprising stem cells for introducing into a patient, comprising:

(a) processing adipose tissue obtained from a patient to release cells therein, wherein said processing comprises one or more procedures selected from the group consisting of:

- (i) physical cutting or mincing of the adipose tissue;
- (ii) treating the adipose tissue with an enzyme that facilitates the release of cells;
- (iii) exposing the adipose tissue to ultrasonic energy; and
- (iv) treating the adipose tissue with perflurocarbons; and

(b) separating the released cells from non-cellular tissue components, wherein said separating comprises one or more procedures selected from the group consisting of:

- (i) use of a density gradient;
- (ii) centrifugation; and
- (iii) filtration;

wherein said method does not include isolating stem cells from other cells separated in (b), thereby preparing a cell population comprising adipose tissue-derived stem cells.

152. (New) The method of claim 151, further comprising:  
(c) suspending the separated cells in a physiologically compatible buffer.

153. (New) The method of claim 151, further comprising:  
(c) placing the separated cells in a container.

154. (New) The method of claim 153, wherein the container is a syringe.

155. (New) The method of claim 153, further comprising shipping the container comprising the separated cells to a physician or veterinarian.

156. (New) The method of claim 1, further comprising:  
(c) suspending the separated cells in a physiologically compatible buffer.

157. (New) The method of claim 1, further comprising:  
(c) placing the separated cells in a container.

158. (New) The method of claim 157, wherein the container is a syringe.

159. (New) The method of claim 157, further comprising shipping the container comprising the separated cells to a physician or veterinarian.